

Clinical presentation of human West Nile virus disease

Approximately 80% of West Nile virus (WNV) infections are asymptomatic and 20% result in a febrile illness of variable severity (non-neuroinvasive disease). Less than 1% of infections result in serious neuroinvasive disease (meningitis, encephalitis, myelitis, cranial and peripheral neuropathies). Serious WNV disease is most common in persons >50 years of age. Children seldom have symptoms.

When to suspect a patient has WNV disease

WNV disease is most likely when mosquitoes are active (May-November) in areas where the virus has been known to occur. As of July 2004, no human WNV disease has been acquired in Washington, however, we expect the virus will affect our state this season. Therefore, WNV disease should be suspected in a patient with a compatible clinical presentation (without an alternative diagnosis), regardless of their travel history.

Reporting suspected WNV disease to public health

Healthcare providers are required by WAC 246-101 to report suspected or confirmed West Nile virus infections to their local health department. Tracking this disease will provide a better understanding of the clinical spectrum and epidemiology. Reports should be made to your local health department on patients with the following:

1) Suspected or confirmed WNV neuroinvasive disease

Fever in the absence of a more likely diagnosis in a patient with at least one of the following:

- Acute change in mental status (e.g., disorientation, obtundation, stupor, or coma), or
- Other acute central or peripheral neurological dysfunction (e.g., paresis or paralysis, nerve palsies, sensory deficits, abnormal reflexes, seizures, or movement disorders), or
- Cerebrospinal fluid pleocytosis associated with an illness compatible with meningitis

2) WNV non-neuroinvasive disease

Documented fever ($>38.0^{\circ}\text{C}$) (in the absence of a more likely diagnosis) in a patient who has laboratory evidence of WNV disease:

- WNV-specific IgM antibodies in serum measured by enzyme immunoassay (EIA), or
- Isolation of WNV from, or detection of viral nucleic acid in, blood

3) Asymptomatic WNV disease with laboratory evidence of WNV infection in

- A pregnant woman
- A neonate or breastfeeding infant of a WNV infected mother
- Someone who donated or received blood products in previous month
- Someone who donated or received a tissue or organ transplant in the previous month
- Someone who has had occupational exposure to WNV (in a laboratory or through contact with infected animals)

For more information or to report a suspected case of WNV disease:

Call your local health department (for local health contact information, see the DOH web page: <http://www.doh.wa.gov/LHJMap/LHJMap.htm> or the Washington State Department of Health Communicable Disease Epidemiology Section at 206.361.2914 or toll free 877.539.4344. Visit our web site at: <http://www.doh.wa.gov/Notify/nc/wnv.htm>.